Controlling air conditioning systems safely without placing an excessive load on compressors or unduly raising indoor temperature; identifying problem areas by visualizing electricity usage

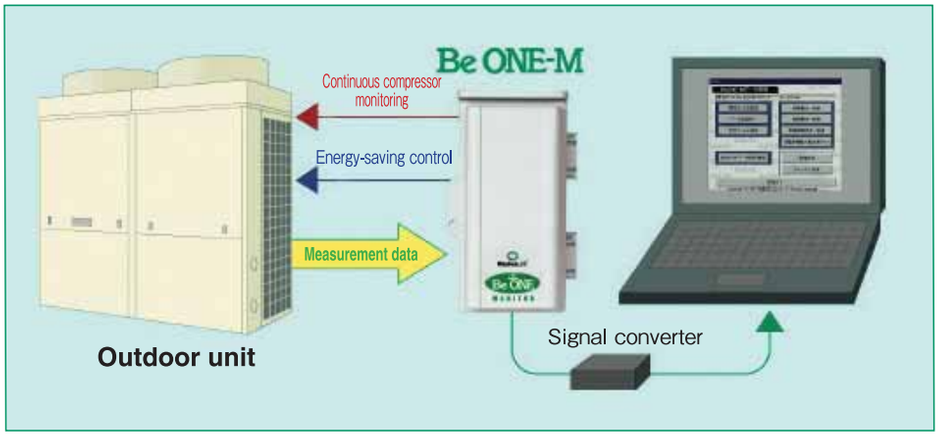
Intermittent Operation Control Device for Air Conditioners

Feature

- The product delivers dependable energy savings while maintaining indoor temperature as appropriate for the season (including wet and dry seasons) and time of day (4 zones per 24-hour period).
- A power measurement function makes it easy to extract accurate records of power savings and calculate CO_2 reductions.
- Simple on/off control damages compressors. A compressor protection function enables safer control.

Overview (Technical principles, actions, etc.)

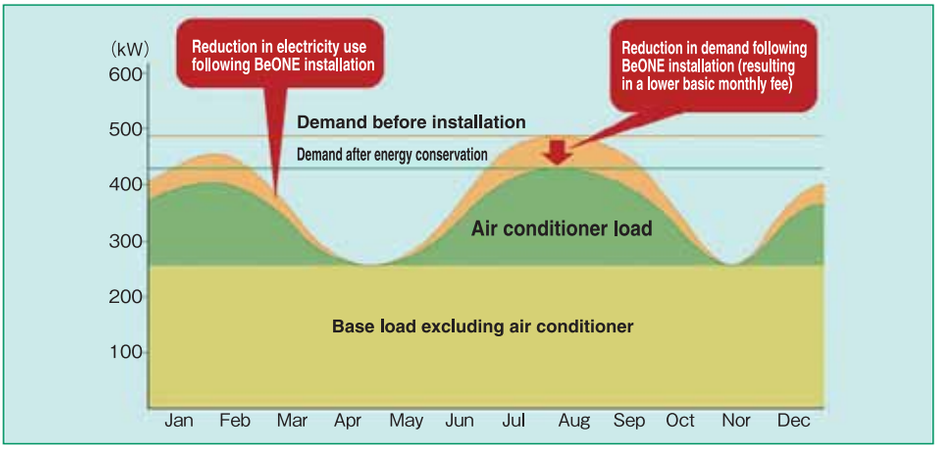
Compressor operation accounts for approximately 90% of air conditioner and refrigerator power consumption. BeONE-M continuously monitors the operating state of air conditioner and refrigerator compressors and controls compressor operation using safe, optimal timing. In this way, the system can reduce power consumption and lower demand values while maintaining air conditioner comfort and capacity. It also provides easy-to-use functionality for extracting recorded power consumption and reduction data, thereby visualizing electricity usage. Visualizing usage serves as a crucial starting point in the problem-solving process by highlighting problems and issues in a clear, easy-to-understand manner.



Product photograph

Effects

BeONE-M stores up to 180 days of half-hourly data points for parameters including demand value, power consumption, and power savings, and the ability to easily create charts and graphs based on this recordkeeping functionality makes submitting energy-saving activity reports a breeze. The attached graph represents raw data from a Toyo Standard Asia customer. You can easily verify the system's benefits by comparing values for "off" mode starting April 1, 2008, and "on" mode starting on April 16, 2008. Interested organizations are recommended to have a demo unit installed so that they can test the system with their own equipment to assess the difference in energy use.



Applicable field
Package air conditioners in manufacturing plants, commercial buildings, hospitals, supermarkets, and other facilities

Toyo Standard Asia Pte Ltd 138 Robinson Road #16-09 The Corporate Office Singapore 068906

● TEL / 65-6448-6457 65-9736-8846 (Mobile phone) ● FAX / 65-6241-5602 ● E-Mail / satoshi_uetsugu@ntti.net.sg ● http://www.toyostd.co.jp